Application No. 09/316,651 Amdt. dated August 1, 2003 Reply to Office Action of May 19, 2003

Amendments to the Specification:

Per the Examiner's request in an Office Action dated May 19, 2003, please replace the paragraph on page 11, at lines 4 through 20, with the following amended paragraph:

The fact that probes do not have to be repeatedly inserted into and removed from served food enables a plurality of probes to be hard-wired via conductors 21, 21', 21' to a single transmitter 24, without substantively affecting the functioning of the devices. By contrast, hard wiring of utensil sensing devices 18, 18' to a central transmitter is not generally viable given the requirement of mobility of such devices. Utilization of a single transmitter 24 to service several simply-constructed probes not intended to be regularly removed from food significantly reduces the overall costs of sensing subsystem 14. To the end that conductors 21, 21', 22' 21" are minimally obtrusive to a food service agent serving food, conductors 21, 21', 22'' 21" may comprise flattened conductor housings and may be fixedly adhered to or otherwise secured to at least one surface in proximity with containers 16, such as surfaces 29, 31 of a member 33 that supports containers 16 as is shown in Fig. 1A.

Per the Examiner's request in an Office Action dated May 19, 2003, please replace the paragraph on page 12, at lines 9 through 26, with the following amended paragraph:

In a typical embodiment, each sensing device includes a signal processing circuit 46 powered by battery 37 for processing signals from at least one sensor of the device. Normally, the at least one sensor of each device will include a temperature sensor 18 38. In addition to receiving signals from a temperature sensor 38, signal processing circuit 46 receives signals from battery 37 indicating a voltage level thereof.

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Per the Examiner's request in an Office Action dated May 19, 2003, please replace the paragraph beginning on page 12, at line 17 through page 13, line 22, with the following amended paragraph:

In the exemplary embodiment, the signal processing circuit 46 of each device develops a multi-character digital bitstream 50 as represented in Fig. 3 encoding data generated by that device, for transmission to processing subsystem 14. Bitstream 50 may include a first set of bits 52 encoding a preamble for the data transmission (a set of bits indicating the following bits encode valid data), a second set of bits 54 indicating the temperature reading from temperature sensor 38, a third set of bits 56 indicating the voltage level of battery 37. In addition to including sets of bits that include sensor data and battery level data, bitstream 50 may also include sets of bits identifying the particular sensing device generating the data. Accordingly, each signal processing circuit 46 should include circuit elements generating identification stamps indicating the device originating the data. Circuit 46 may include circuit elements which generate at least two identification stamps, in the form of bit sets of bitstream 50, for each device. To the end a data bitstream encodes an identifier of the device generating the bitstream, a fourth set of bits 58 of bitstream 50 may encode the device type (i.e. spoon, fork, ladle, spatula, probe) of the device, while a fifth set of bits 60 of bitstream 50 may encode a specific device identifier. A sixth set of bits 62 of bitstream generated by circuit 46 should include a postamble indicating an end of valid data transmission. Since circuit elements for conversion of analog data from sensor 38 and battery 37 and generating a bitstream of data therefrom, and for generating identification bit sets are well known, they will not be described further herein.

Per the Examiner's request in an Office Action dated May 19, 2003, please replace the paragraph on page 15, beginning at line 4 through page 16, line 8, with the following amended paragraph:

Data generated by the various sensor elements 37, 38 of sensor subsystem 12 normally does not have to be sampled at an extremely high sample rate. Although data from the various sensing elements could be sampled at virtually any sample rate

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> from an ultrafast submicrosecond sampling rate to a slower sample rate of once per several minutes, it is normally sufficient to configure system 10 to sample data at a rate that ranges from about once per several seconds to once per several minutes. Typically, system 10 is configured to sample data from each device 18, 20 at a sampling rate of about one sample per minute. Because the data generated by the various devices 18, 20 does not have to be sampled at an extremely high data rate, and the occurrences of collisions between samples are correspondingly rare, it is normally not necessary to establish a high degree of coordination between the receiver 64 and the transmitters 17, 22, 22', 24 of subsystem 12. Accordingly, operable communication between transmitters 22, 22', 24 and receiver 64 can normally be established by configuring transmitters 22, 22' to send bitstream samples generated by their associated sensor device at a rate of about once per minute, and configuring transmitter 24 so that transmitter 24 transmits samples received at each of its input ports at a rate of about one sample per minute. A sample period should be long enough so that at least one complete bitstream 50 as described with reference to Fig. 3 is assured of being included in each sample. Preferably, a sample period is configured so that each sample contains a plurality of data bitstreams.

Per the Examiner's requested in an Office Action dated May 19, 2003, please replace the paragraph on page 19, at lines 11 through 18, with the following amended paragraph:

Before encrypting data and writing encrypted bitstream data to preconfigured indexed data storage structures of memory 68 66, processor 68 66 may drop those sets of bits from bitstream 78 pertaining to the date stamp information (year, month, day) in the interest of conserving memory space. However, the security of the encryption may be improved by maintaining the date stamp bits through the encryption process.